

**PACKAGING STRUCTURE AND METHOD****ABSTRACT**

A method for forming metallurgical interconnections and polymer adhesion of a flip chip to a substrate includes providing a chip having a set of bumps formed on a bump side thereof and a substrate having a set of interconnect points on a metallization thereon, providing a measured quantity of a polymer adhesive in a middle region of the chip on the bump side, aligning the chip with the substrate so that the set of bumps aligns with the set of interconnect points, pressing the chip and the substrate toward one another so that a portion of the polymer adhesive contacts the substrate and the bumps contact the interconnect points, and heating the bumps to a temperature sufficiently high to form a metallurgical connection between the bumps and the interconnect points. Also, a flip chip package is made by the method. In some embodiments the metallurgical connection includes an alloy of gold and tin at the interface between the bumps and the interconnect points.